



## BOOTING FROM MAC DRIVES CONNECTED TO ATTO SAS HBA's

With the addition of EFI support to our SAS drivers for ATTO HBAs and RAID adapters, you now have the capability to boot from an internal Mac drive.

Certain Mac Models pose challenges when booting from an internal drive. The following instructions will guide you through the process, for the Harpertown and Nehalem Mac Pro Models.

### Harpertown Mac Pros (pre 2009)

You will need a tool kit and should follow the directions in the Mac Pro Raid Card installation guide to disconnect the iPass cable from the motherboard. This guide can be downloaded at:

[http://manuals.info.apple.com/en\\_US/MacPro\\_RAIDCard\\_Installation.pdf](http://manuals.info.apple.com/en_US/MacPro_RAIDCard_Installation.pdf)

Once the cable is exposed (Figure 1), untangle it from the other wires to achieve maximum length. Route the cable towards the PCIe slots. If the backplane's mini-SAS cable won't reach the ATTO HBA then an extension cable may be required. Install the ATTO HBA or RAID adapter and connect the iPass cable to the internal port on the ATTO card.



**Figure 1** – iPass cable disconnected from motherboard

### Nehalem Mac Pros (2009 or later)

The new Nehalem Mac Pro's (2009 or later) will require third party intervention as they no longer utilize the mini-SAS connection to the Apple RAID Card. Apple uses proprietary technology to run all RAID functions, through the motherboard's PCIe bus, after the Raid card is installed.

There is, however, a third party solution available at [MaxUpgrades.com](http://MaxUpgrades.com) which replaces the Mac Pro's standard drive sleds with a custom sled that utilizes hard drive power from the backplane. This allows SAS/SATA connections to the drive from a third party controller, such as ATTO ESAS Adapters (Figure 2). Price depends on the connection desired (SAS or SATA) and by the number of sleds desired. The sled interface components can be found at:

[http://www.maxupgrades.com/istore/index.cfm?fuseaction=product.display&product\\_id=189](http://www.maxupgrades.com/istore/index.cfm?fuseaction=product.display&product_id=189)



**Figure 2** – Custom sleds and ATTO ESAS Adapter

For additional information please contact ATTO, your high performance, value added HBA and RAID supplier.

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